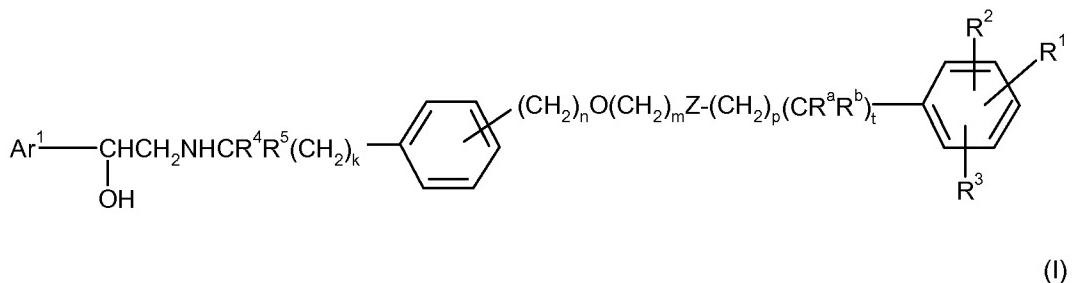


Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

1. (Currently Amended) A compound of formula (I):



or a salt, solvate, or physiologically functional derivative thereof, wherein:

R^1 is selected from hydrogen, C₁₋₆alkyl, hydroxy, cyano, nitro, halo, C₁₋₆haloalkyl, XCO_2R^8 , $-XC(O)NR^7R^8$, $-XNR^6C(O)R^7$, $-XNR^6C(O)NR^7R^8$, $-XNR^6C(O)NC(O)NR^7R^8$, $-XNR^6SO_2R^7$, $-XSO_2NR^9R^{10}$, XSR^6 , $XSOR^6$, XSO_2R^6 , $-XNR^7R^8$, $-XNR^6C(O)OR^7$, or R^1 is selected from -X-aryl, -X-hetaryl, or -X-(aryloxy), each optionally substituted by 1 or 2 groups independently selected from hydroxy, C₁₋₆alkoxy, halo, C₁₋₆alkyl, C₁₋₆haloalkyl, $-NR^6C(O)R^7$, SR^6 , SOR^6 , $-SO_2R^6$, $-SO_2NR^9R^{10}$, $-CO_2R^8$, $-NR^7R^8$, or hetaryl optionally substituted by 1 or 2 groups independently selected from hydroxy, C₁₋₆alkoxy, halo, C₁₋₆alkyl, or C₁₋₆haloalkyl;

X is $-(CH_2)_q-$ or C₂₋₆ alkenylene;

q is an integer from 0 to 6;

R^6 and R^7 are independently selected from hydrogen, C₁₋₆alkyl, C₃₋₇cycloalkyl, aryl, hetaryl, hetaryl(C₁₋₆alkyl)- and aryl(C₁₋₆alkyl)- and R^6 and R^7 are each

independently optionally substituted by 1 or 2 groups independently selected from halo, C₁₋₆alkyl,

C₃₋₇ cycloalkyl, C₁₋₆ alkoxy, C₁₋₆haloalkyl, -NHC(O)(C₁₋₆alkyl), -SO₂(C₁₋₆alkyl), -SO₂(aryl), -CO₂H, and -CO₂(C₁₋₄alkyl), -NH₂, -NH(C₁₋₆alkyl), aryl(C₁₋₆alkyl)-, aryl(C₂₋₆alkenyl)-, aryl(C₂₋₆alkynyl)-, hetaryl(C₁₋₆alkyl)-, -NHSO₂aryl, -NH(hetarylC₁₋₆alkyl), -NHSO₂hetaryl, -NHSO₂(C₁₋₆alkyl), -NHC(O)aryl, or -NHC(O)hetaryl:

R⁸ is selected from hydrogen, C₁₋₆alkyl and C₃₋₇ cycloalkyl;

or R⁷ and R⁸, together with the nitrogen atom to which they are bonded, form a 5-, 6- or 7- membered nitrogen – containing ring;

R⁹ and R¹⁰ are independently selected from hydrogen, C₁₋₆alkyl, C₃₋₇cycloalkyl, aryl, hetaryl, hetaryl(C₁₋₆alkyl)- and aryl(C₁₋₆alkyl)-, or R⁹ and R¹⁰ , together with the nitrogen to which they are bonded, form a 5-, 6-, or 7- membered nitrogen containing ring;

and R⁹ and R¹⁰ are each optionally substituted by one or two groups independently selected from halo, C₁₋₆alkyl, and C₃₋₇cycloalkyl, C₁₋₆haloalkyl;

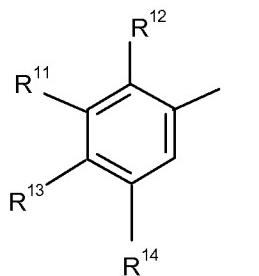
R² is selected from hydrogen, hydroxy, C₁₋₆alkyl, C₁₋₆alkoxy, halo, aryl, aryl(C₁₋₆alkyl)-, C₁₋₆haloalkoxy, and C₁₋₆haloalkyl;

R³ is selected from hydrogen, hydroxy, C₁₋₆alkyl, C₁₋₆alkoxy, halo, aryl, aryl(C₁₋₆alkyl)-, C₁₋₆haloalkoxy, and C₁₋₆haloalkyl; and

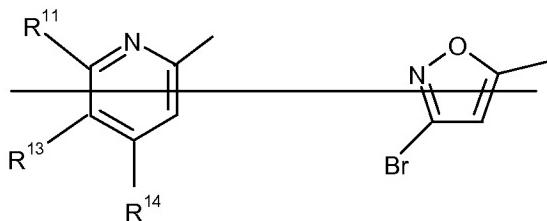
R⁴ and R⁵ are independently selected from hydrogen and C₁₋₄ alkyl with the proviso that the total number of carbon atoms in R⁴ and R⁵ is not more than 4;

R^a and R^b each independently represent hydrogen or C₁₋₄alkyl;

Ar¹ is a group selected from

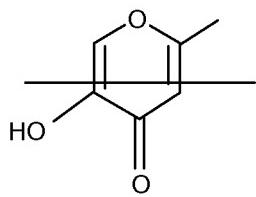


(a)



—(b)— (c)

—and—



(d)

wherein R¹¹ represents hydrogen, halogen, -(CH₂)_rOR¹⁵, -NR¹⁵C(O)R¹⁶, -NR¹⁵SO₂R¹⁶, -SO₂NR¹⁵R¹⁶, -NR¹⁵R¹⁶, -OC(O)R¹⁷ or OC(O)NR¹⁵R¹⁶, and R¹² represents hydrogen, halogen or C₁₋₄ alkyl;

or R¹¹ represents -NHR¹⁸ and R¹² and -NHR¹⁸ together form a 5- or 6-membered heterocyclic ring;

R¹³ represents hydrogen, halogen, -OR¹⁵ or -NR¹⁵R¹⁶;

R¹⁴ represents hydrogen, halogen, haloC₁₋₄ alkyl, -OR¹⁵, -NR¹⁵R¹⁶, -OC(O)R¹⁷ or OC(O)NR¹⁵R¹⁶;

R¹⁵ and R¹⁶ each independently represents hydrogen or C₁₋₄ alkyl, or in the groups

$-\text{NR}^{15}\text{R}^{16}$, $-\text{SO}_2\text{NR}^{15}\text{R}^{16}$ and $-\text{OC(O)NR}^{15}\text{R}^{16}$, R^{15} and R^{16} independently represent hydrogen or C_{1-4} alkyl or together with the nitrogen atom to which they are attached form a 5-, 6- or 7- membered nitrogen-containing ring,

R^{17} represents an aryl group which may be unsubstituted or substituted by one or more substituents selected from halogen, C_{1-4} alkyl, hydroxy, C_{1-4} alkoxy or halo C_{1-4} alkyl; and

r is zero or an integer from 1 to 4;

Z is O, CH_2 - or a single bond;

n is an integer of from 1 to 4;

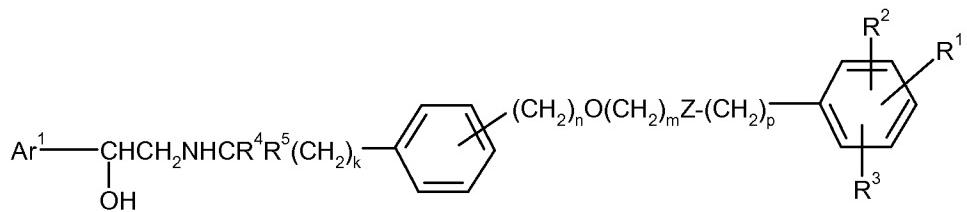
m is zero or an integer of from 1 to 4;

p is zero or an integer of from 1 to 3;

k is an integer from 1 to 3; and

t is zero or 1.

2. (Original) A compound of formula (Ia):



(Ia)

or a salt, solvate, or physiologically functional derivative thereof, wherein:

k is an integer from 1 to 3;

n is an integer of from 1 to 4;

m is an integer of from 2 to 4;

p is an integer of from 1 to 4;

Z is O or CH_2 ;

R^1 is selected from hydrogen, C_{1-6} alkyl, hydroxy, cyano, nitro, halo, C_{1-6} haloalkyl, XCO_2R^8 , $-XC(O)NR^7R^8$, $-XNR^6C(O)R^7$, $-XNR^6C(O)NR^7R^8$, $-XNR^6C(O)NC(O)NR^7R^8$, $-XNR^6SO_2R^7$, $-XSO_2NR^9R^{10}$, XSR^6 , $XSOR^6$, XSO_2R^6 , $-XNR^7R^8$, $-XNR^6C(O)OR^7$, or R^1 is selected from - X -aryl, - X -hetaryl, or - X -(aryloxy), each optionally substituted by 1 or 2 groups independently selected from hydroxy, C_{1-6} alkoxy, halo, C_{1-6} alkyl, C_{1-6} haloalkyl, $-NR^6C(O)R^7$, SR^6 , SOR^6 , $-SO_2R^6$, $-SO_2NR^9R^{10}$, $-CO_2R^8$, $-NR^7R^8$, or hetaryl optionally substituted by 1 or 2 groups independently selected from hydroxy, C_{1-6} alkoxy, halo, C_{1-6} alkyl, or C_{1-6} haloalkyl;

X is $-(CH_2)_q-$ or C_{2-6} alkenylene;

q is an integer from 0 to 6;

R^6 and R^7 are independently selected from hydrogen, C_{1-6} alkyl, C_{3-7} cycloalkyl, aryl, hetaryl, hetaryl(C_{1-6} alkyl)- and aryl(C_{1-6} alkyl)- and R^6 and R^7 are each independently optionally substituted by 1 or 2 groups independently selected from halo, C_{1-6} alkyl,

C_{3-7} cycloalkyl, C_{1-6} alkoxy, C_{1-6} haloalkyl, $-NHC(O)(C_{1-6}$ alkyl), $-SO_2(C_{1-6}$ alkyl), $-SO_2(aryl)$, $-CO_2H$, and $-CO_2(C_{1-4}$ alkyl), $-NH_2$, $-NH(C_{1-6}$ alkyl), aryl(C_{1-6} alkyl)-, aryl(C_{2-6} alkenyl)-, aryl(C_{2-6} alkynyl)-, hetaryl(C_{1-6} alkyl)-, $-NHSO_2aryl$, $-NH(hetarylC_{1-6}$ alkyl), $-NHSO_2hetaryl$, $-NHSO_2(C_{1-6}$ alkyl), $-NHC(O)aryl$, or $-NHC(O)hetaryl$:

R^8 is selected from hydrogen, C_{1-6} alkyl and C_{3-7} cycloalkyl;

or R^7 and R^8 , together with the nitrogen atom to which they are bonded, form a 5-, 6- or 7- membered nitrogen – containing ring;

R^9 and R^{10} are independently selected from hydrogen, C₁₋₆alkyl, C₃₋₇cycloalkyl, aryl, hetaryl, hetaryl(C₁₋₆alkyl)- and aryl(C₁₋₆alkyl)-, or R^9 and R^{10} , together with the nitrogen to which they are bonded, form a 5-, 6-, or 7- membered nitrogen containing ring;

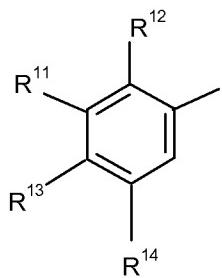
and R^9 and R^{10} are each optionally substituted by one or two groups independently selected from halo, C₁₋₆alkyl, and C₃₋₇cycloalkyl, C₁₋₆haloalkyl;

R^2 is selected from hydrogen, hydroxy, C₁₋₆alkyl, C₁₋₆alkoxy, halo, aryl, aryl(C₁₋₆alkyl)-, C₁₋₆haloalkoxy, and C₁₋₆haloalkyl;

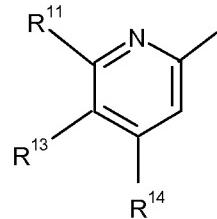
R^3 is selected from hydrogen, hydroxy, C₁₋₆alkyl, C₁₋₆alkoxy, halo, aryl, aryl(C₁₋₆alkyl)-, C₁₋₆haloalkoxy, and C₁₋₆haloalkyl; and

R^4 and R^5 are independently selected from hydrogen and C₁₋₄ alkyl with the proviso that the total number of carbon atoms in R^4 and R^5 is not more than 4;

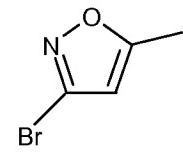
Ar¹ is a group selected from



(a)

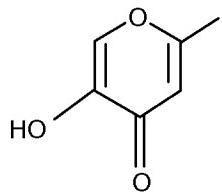


(b)



(c)

and



(d)

wherein R¹¹ represents halogen, -(CH₂)_rOR¹⁵, -NR¹⁵C(O)R¹⁶, -NR¹⁵SO₂R¹⁶, -SO₂NR¹⁵R¹⁶, -NR¹⁵R¹⁶, -OC(O)R¹⁷ or OC(O)NR¹⁵R¹⁶, and R¹² represents hydrogen, halogen or C₁₋₄ alkyl;

or R¹¹ represents -NHR¹⁸ and R¹² and -NHR¹⁸ together form a 5- or 6-membered heterocyclic ring;

R¹³ represents hydrogen, halogen, -OR¹⁵ or -NR¹⁵R¹⁶;

R¹⁴ represents hydrogen, halogen, haloC₁₋₄ alkyl, -OR¹⁵, -NR¹⁵R¹⁶, -OC(O)R¹⁷ or OC(O)NR¹⁵R¹⁶

R¹⁵ and R¹⁶ each independently represents hydrogen or C₁₋₄ alkyl, or in the groups

-NR¹⁵R¹⁶, -SO₂NR¹⁵R¹⁶ and -OC(O)NR¹⁵R¹⁶, R¹⁵ and R¹⁶ independently represent hydrogen or C₁₋₄ alkyl or together with the nitrogen atom to which they are attached form a 5-, 6- or 7- membered nitrogen-containing ring,

R^{17} represents an aryl group which may be unsubstituted or substituted by one or more substituents selected from halogen, C_{1-4} alkyl, hydroxy, C_{1-4} alkoxy or halo C_{1-4} alkyl; and

r is zero or an integer from 1 to 4.

3. (Previously Presented) A compound according to claim 1 wherein the group R^1 is selected from hydrogen, C_{1-4} alkyl, hydroxy, halo, $-NR^6C(O)NR^7R^8$, $-NR^6C(O)R^7$, $-SO_2NR^9R^{10}$, $-SOR^6$, $-SO_2R^6$, and $-NR^6SO_2R^7$ wherein R^6 and R^7 are as defined in claim 1 or claim 2.

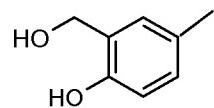
4. (Previously Presented) A compound according to claim 1 wherein R^2 and R^3 are independently selected from hydrogen, hydroxyl, halogen, halo C_{1-6} alkyl, C_{1-6} alkyl, C_{1-6} alkoxy and halo C_{1-6} alkoxy.

5. (Previously Presented) A compound according to claim 1 wherein R^4 and R^5 each represent hydrogen.

6. (Previously Presented) A compound according to claim 1 wherein R^a and R^b each represent hydrogen.

7. (Canceled)

8. (Original) A compound according to claim 7 wherein the group (a) is a group of formula (i):



(i)

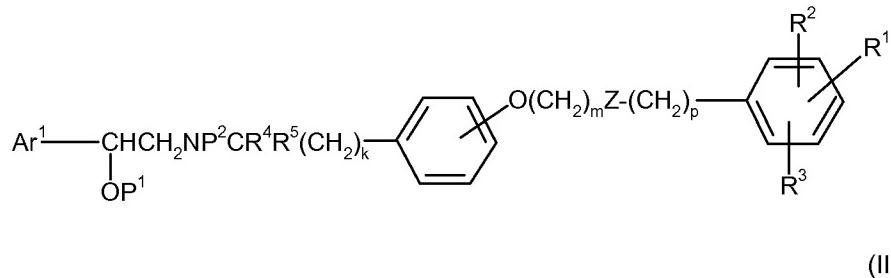
9-12. (Canceled)

13. (Previously Presented) A pharmaceutical formulation comprising a compound of formula (I), according to claim 1, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof, and a pharmaceutically acceptable carrier or excipient, and optionally one or more other therapeutic ingredients.

14. (Cancelled)

15. (Previously Presented) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises:

deprotecting a protected intermediate of formula (II):

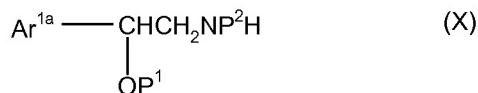


or a salt or solvate thereof, wherein R¹, R², R³, R⁴, R⁵, Z, k, m, n and p are as defined for the compound of formula (I), and P¹ and P² each independently represents hydrogen or a protecting group provided that the compound of formula (II) contains at least one protecting group

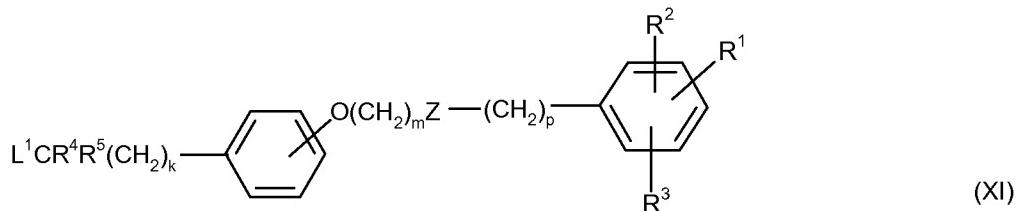
wherein said deprotecting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

- (i) removing any protecting groups;
(ii) separating an enantiomer from a mixture of enantiomers; and
(iii) converting the product to a corresponding salt, solvate,
or physiologically functional derivative thereof.

16. (Previously Presented) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises alkylating an amine of formula (X)



wherein Ar^{1a} is Ar¹ or a protected form thereof, and P² and P¹ are each independently either hydrogen or a protecting group,
 with a compound of formula (XI):

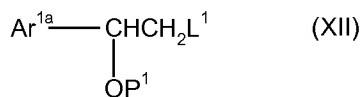


wherein R¹, R², R³, R⁴, R⁵, Z, k, m, n and p are as defined for the compound of formula (I) and L¹ is a leaving group;

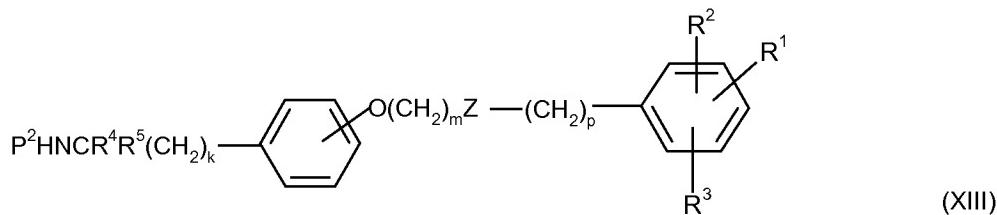
wherein said alkylating step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

- (i) removing any protecting groups;
(ii) separating an enantiomer from a mixture of enantiomers; and
(iii) converting the product to a corresponding salt, solvate, or physiologically functional derivative thereof.

17. (Previously Presented) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises reacting a compound of formula (XII):



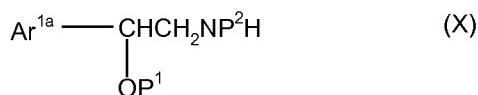
wherein Ar^{1a} is Ar^1 or a protected form thereof, P^1 is either hydrogen or a protecting group and L^1 is a leaving group, with an amine of formula (XIII):



wherein P^2 is either hydrogen or a protecting group wherein said reacting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

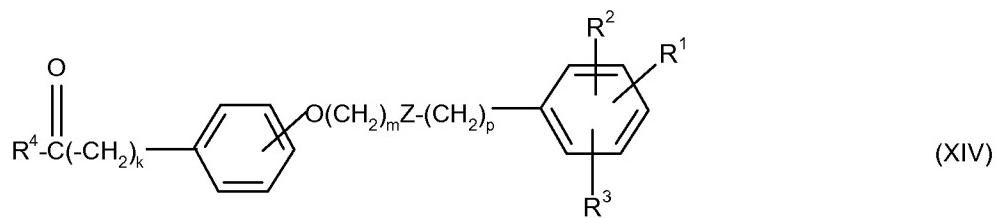
- (i) removing any protecting groups;
- (ii) separating an enantiomer from a mixture of enantiomers; and
- (iii) converting the product to a corresponding salt, solvate, or physiologically functional derivative thereof.

18. (Previously Presented) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises reacting a compound of formula (X):



wherein Ar^{1a} is Ar^1 or a protected form thereof, and P^1 and P^2 are each independently either hydrogen or a protecting group,

with a compound of formula (XIV):



under conditions suitable to effect reductive amination;

wherein said reacting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

- (i) removing any protecting groups;
- (ii) separating an enantiomer from a mixture of enantiomers; and
- (iii) converting the product to a corresponding salt, solvate, or physiologically functional derivative thereof.

19. (Previously Presented) The method according to Claim 10, wherein the mammal is a human.

20. (Previously Presented) The method according to Claim 10, wherein the clinical condition is asthma.

21. (Previously Presented) The method according to Claim 10, wherein the clinical condition is COPD.